

From qrp-1@lehigh.edu Mon Jun 12 16:22:00 1995
Message-Id: <Pine.SOL.3.91.950612121236.17883A@orichalc.acsu.buffalo.edu>
From: Mark D Jarmuz <jarmuz@acsu.buffalo.edu>
Subject: 30 meter test
Date: Mon, 12 Jun 1995 12:22:00 EDT

Hi Gang

Just wanted to throw my 2 cents worth in on the 30
meter test thats going on.I agree with KC2DU(John)
30 metwerts has been really wide open here in WNY..
Believe it or not Iam working more DX than state
side..Me and My good buddy AA2WJ(hes not on Inet)
(Dick)have been having a ball on 30m..So hope to
Work some of you guys soon.....

Best of 73s/72s AA2PF(alias Peter FoX)....
DAVE.....

From qrp-1@lehigh.edu Mon Jun 12 17:49:45 1995
Message-Id: <199506121748.MAA06418@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: Re: 30 meter test
Date: Mon, 12 Jun 1995 13:49:45 EDT

Dave,

It is not a test, it is a study. :-) :-)

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 12 13:17:58 1995
Message-Id: <9506121332.AA08538@dtcs70.dtc.kodak.com>
From: mitchell@dtcs70.dtc.kodak.com (Brad Mitchel)
Subject: 30 meter test~
Date: Mon, 12 Jun 1995 09:17:58 EDT

Hi all, got on 30 meters last night, and got Bob, V01DRB up there in N.F.

He was 549 on my ft-980 with the 80 meter tv twin lead fed dipole. I was playing with the filters on this rig, that I recently aquired, and by the end of the qso, I had the filters figured out.

They work great! Bob's MFJ Loop antenna was really working good too! That's a good data point for all that are apartment dwellers!

73/2 Brad WB8YGG

From qrp-1@lehigh.edu Mon Jun 12 12:30:23 1995
Message-Id: <9506121224.AA02881@apt07.Kodak.COM>
From: spoon@apt07.kodak.com (John Spoonhower)
Subject: 30M opening
Date: Mon, 12 Jun 1995 08:30:23 EDT

>That is very interesting and encouraging, Paul.

>

>My instinct has always been to think ill of another
>ham whenever I heard the chirps in the low part
>of 30M.

>

>I'm glad that my misgivings have been proven wrong.

>

>What's also interesting is that we all are hearing
>these signals just now. I don't recall hearing
>the ones near 10.106 a while back. Can we use the
>fact that we're hearing them now, as an indication
>about 30M propogation to areas where these signals
>source?

>

>If so, it's time for some QRPp DX into those regions!

>

>Fire up the rigs boys, it's time to break some records!

>>

It's open guys....I worked SP3HUU, PY20W, and I8SAT at around 0200 UTC saturday from WNY. I really had no trouble running the Argosy at 5 w and making contacts. I didn't hear many other people from this list. You all must have social lives and do other things on friday nights..... :~).

72, john, kc2du

From qrp-1@lehigh.edu Mon Jun 12 13:25:31 1995
Message-Id: <9506121319.AA12671@rgfn.epcc.Edu>
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: Re: 30M opening
Date: Mon, 12 Jun 1995 09:25:31 EDT

Re. the DX on 30M, band has been good in W. Texas also. Hrd Andy, F3NB but he was busy with the QRO fellows. Did work Ken, LZ1LZ, 10.108 0345Z. One call and he was right back. Using the QRP+. Good Operator. Ray, W5XE/V31XE, El Paso, Tx

From qrp-1@lehigh.edu Mon Jun 12 14:39:31 1995
Message-Id: <950612103330_69021404@aol.com>
From: PDouglas12@aol.com
Subject: 30m report
Date: Mon, 12 Jun 1995 10:39:31 EDT

I wish to report a 30 meter propagation opening last night (0045 UTC 6/12/95) between Lawrence NY (me) and Newfoundland (V01DRB a/k/a Bob Gobrick) . I was tweaking my Radiokit QRP30 as it was developing a nasty broadcast image (more on that below). I called some K something or other at about 10.105, and he didn't come back--this happens occasionally when I run QRP :-). But then this V01 called me. The opening exchange was approximatley like this:

WJ2V de V01DRB K

V01DRB de WJ2V Is that you Bob? BK

BK r r yes. Ur name? BK

BK r r Preston Preston BK(I always send it twice 'cause I don't have a "regular" name--bet Nils has to do it too).

BK de V01DRB. Thought I recognized the call. Hi Hi.

...and so on.

Working one of our own by sheer chance was great. I would note two things.

First, 30 has very little activity, so even a live band sounds dead sometimes. You gotta get a CQ out there guys--or we won't have much of a propagation study with everyone listening. Second, the chances of meeting an internetter are significantly higher on 30m since there aren't many others using 30 meters. Stop reading those doom and gloom propagation reports and start operating. Half the dead bands aren't really dead. There only "mostly dead", and that isn't the same!

On the QRP30--I opened it to tweak the caps thinking I could tweak out the newly heard bc interference. Experience says new problems are not an out of whack adjustment. Either there is a part failure or a physical change.

It was the latter. Ignoring my own advice, I started adjusting. Finally, though I realized the 12+ line was running against the vfo toroid. Actually touching it. It was carrying in the interfering signal and mixing it at the vfo. This was all due to some lazy builder (me) failing to properly secure the power cord pig tail by knotting it inside the chassis. Pulling the rig by the tail had in turn pulled the cord across the coil, instead of running "high" above it. Anyway, the above qso proved the problem solved to my entire satisfaction. By the way, the above experience also works for cars.

If the engine suddenly starts to act up, tweaking the carb is the last thing to do. First look for a failed, cracked, fouled or loose part.

72, all and tnx Bob, fer ur gud ears es fb QS0!

P.S. Bob, does your MFJ drift a little? One of us does!

From qrp-l@lehigh.edu Mon Jun 12 18:32:12 1995
Message-Id: <199506121830.QAA14667@public.compuser.net>
From: rgobrick@public.compuser.net (Robert J. Gobrick)
Subject: Re: 30m report
Date: Mon, 12 Jun 1995 14:32:12 EDT

Preston and QRP-L Gang,

Yesterday was Internet day on 30 meters for me. It all started with a surprise QSO with Preston WJ2V in Long Island and his chirpy and drifting RadioKit 30 rig (Preston - how dare you ask if my MFJ was drifting - I made the mod for the vfo caps and drift is almost gone ;-). It's always a surprise when you hear a call rather than see it come across your qrp-l computer screen. On the computer Preston comes across with a "clean" video signal but on the air he comes across with a musical frumpphhh as Nils talked about the other day (only kidding Preston).

Anyway a little while later I hear a nice signal from WB8YGG Brad in Brockport NY. We talk and in the back of my mind I keep thinking I've seen (heard) that call before. Sure enough an hour later over on the qrp-l Brad said that he figured out who I was - another qrp-ler - just amazing.

And to top the evening off I snag in elequent style ole Jim W1FMR down on the New Haaaampshire border pounding through with his qsk conversational type of cw chat (it would help if my MFJ 9030 had a little better QSK).

So there you have it three qrp-lers in one evening - yes 30 meters is alive with the sound of qrp-lers.

Oh by the way I will confess if was not easy working these guys - it took me all day of "spider" listening (spider listening is a type of operation that comes from owning a Spider crystal control xcvr where you sit on one frequency listening and "capture" any station who gets caught in your trap calling cqing. I also CQ myself every once in a while to "attract" other spiders. It's a neat way to keep some back-ground noise in the room when your screwing around ALL DAY trying to fix your computer after you made one simple software "enhancement" - has anyone been there??) I think Chuck operates this way also.

So where was I - oh yea - spider listening - it took me all day to work these guys because all I could work prior to that was TM0RSW, EW1GO, PA3GBQ, EA8/ON6GP, EA8CN and OM3CAE (second QSO with Miro) - it's just the pits not being able to get into North America until late in the day - crummy 30 meters - hi. Again my arsenal is an MFJ 9030 at 5 watts, MFJ Super HiQ Loop on balcony and MFJ/Bencher memory keyer for calling cq while I work.

So again 30 meter propagation study going well as can be attested by WJ2V, WB8YGG and W1FMR.

73/72 Bob V01DRB/WA6ERB

PS: Has Chuck made it back from HamCom - it sounds like Dallas got clobbered in rain and lightning yesterday - I'm wondering if it effected Chuck's QRP conference talk. By the way for all QRP-Lers - Preston WJ2V said he was going down to Dallas next weekend and he'll have an eyeball with Chuck. If anyone wants to set up a schedule with Chuck on 30 meters then maybe Preston can take a list of interested parties - it may be the only way we can get Chuck to make a QSO on 30 meters - you know DX List style...

>I wish to report a 30 meter propagation opening last night (0045 UTC 6/12/95)
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>didn't come back--this happens occasionally when I run QRP :-). But then
>this V01 called me. The opening exchange was approximatley like this:

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>..and so on.

.....

>P.S. Bob, does your MFJ drift a little? One of us does!

>

>

From qrp-1@lehigh.edu Tue Jun 13 02:42:15 1995
Message-Id: <Pine.HPP.3.90.950612213108.2182A-1000000@fohnix.metronet.com>
From: TCJC Library <tcjcslib@metronet.com>
Subject: Re: Apartment Antennas?
Date: Mon, 12 Jun 1995 22:42:15 EDT

My best successes while living in an apartment was with a 'disappearing' antenna -- using small gauge "magnet" wire out the window. To do this mount a small flag holder [the type you slip a flag on a 3' dowel into] just outside the window near the rig. When night comes you slip a dowel with a screw eye on the end into it with the antenna wire run thru the screw eye and wrapped around the screw once to take the strain [so your rig doesn't fly out the window if someone yanks the wire :) -- an alligator clip here can be useful if you will be attaching the far end first[see below] Use a tiny insulator on the far end, attach some

dark twine and when no one's looking toss it into a tree or better yet connect it to a pre-installed clandestine hook you can get to via an outside stairway [I used to pretend to be carrying laundry down the stairs, then I'd pause and quickly attach my wire to the hook, toss the roll of wire towards my apartment, and then hook it to an alligator clip attached to the wire from the tuner -- voila, I was on the air on the air!

here's some more 'wisdom' from a file I found on the internet:

Bottom floor dwellers have some advantages over dwellers on other floors concerning HF antennas. Single unit condo & PUD dwellers fall into this area.

Dwellers in the mid-floor(s) have it the toughest. And top floor dwellers have other advantages the first two don't.

HF antennas are large and trying to hide one can be like trying to hide an elephant. Many hams try different configurations, snap together antennas, wires, and flag poles to conceal their antennas. Some work out, but most get caught in the end.

First, let's look at what you can and can't have. Most restrictive housing

areas have a long list of items you can't have. Clothlines, TV antennas, sheds, flags, BBQ grills, etc. And most of all, the all important HF

antenna. It has something to do with nice surroundings.

Make a list of these items and place them in a column on the left side of the page. Next, list what you can have and list them in the center of the page. Next, list the items that are readily available in the area of your home. Such items are trees, gutters, vents, fences, etc. Look closely and don't leave anything out.

A hidden HF antenna must be just that, hidden to the naked eye, even at a point blank range.

Next, list the areas that you have a ready access to. If you can get to the roof, write it down. How about the attic, basement, trees, etc, without much notice by your neighbors. Most HF antennas are discovered not because of their design or placement, but rather a neighbor spies the ham installing the antenna or at least doing something out of the ordinary.

EX: Creeping around on the roof, on a Saturday afternoon, is going to draw attention. Flinging wires over trees is sure to draw some attention.

The big point here is not to install the antenna by looking like your installing an antenna or doing something out of the ordinary.

the guy goes on to describe a ten meter verticle installed in PVC pipe supporting a bird house --- use your imagination ;-)

I also had good luck stapling #28 wire to wood trim, running up to top of apartments and along eaves -- not getting caught is the trick ;-)

good luck -- if all else fails pack up the rig and head for the park
73 'Doc' W5TB

From qrp-l@lehigh.edu Mon Jun 12 21:00:17 1995
Message-Id: <9506122059.AA24147@philadelphia.libertynet.org>
From: adam@philadelphia.libertynet.org (Adam O'Donnell)
Subject: Artificial Grounds?
Date: Mon, 12 Jun 1995 17:00:17 EDT

What do you guys think of artificial grounds?

73 es tnx

--

Adam O'Donnell, N3RCS/AG
Internet: adam@libertynet.org

My parents tell me that I just take up time and space. It's true -
I'm into relativity theory.

----- PGP Public Key available upon Finger -----

From qrp-1@lehigh.edu Mon Jun 12 11:53:18 1995
Message-Id: <1995Jun12.075142.8860@wb3ffv.ampr.org>
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: Re computer oscillator cans
Date: Mon, 12 Jun 1995 07:53:18 EDT

About computer crystal oscillator cans, which make neat, simple QRP
rigs all by themselves (serious QRP, in the double and single digit
milliwatts), Chuck Adams recently said--

"These puppies run about \$3.25 to \$4.08 in the new Mouser Electronics
catalog, page 56. The frequency of interest is 3.686400MHz and
28.322000MHz. DO NOT hook them up direct to an antenna. They
generate square waves and you will need a lot of filtering before you
output to the antenna."

Don't count on all of them putting out square waves, at least not the
ones for the higher frequencies! Some are closer to sine waves, but
all have lots of harmonics and need a lot of filtering before you put
them on the air.

A couple years ago I checked one at a fairly low frequency,
somewhere below 5 MHz, I think, and recently checked one at work in
the 11 MHz region, and they did put out a fairly respectable square
wave, at least when loaded only by a high impedance scope probe. (I
remember looking at the output of the <5 MHz oscillator on a spectrum
analyzer, and it was a terrible thing to behold! Massive quantities
of spikes going waaaaaay up the spectrum, each one a harmonic.)
However, oscillator cans for 32 and 48 MHz from work, as well as
28.636 MHz from home, all put out something much closer to a sine
wave (albeit rather ragged and cruddy ones, full of harmonic
energy)--again, this being unloaded except for high Z scope probes.
(In all cases, the scopes and probes were rated to at least 100 MHz.)
The cans were from various manufacturers.

As I said above, the ones at the higher frequencies certainly don't put out square waves, but they DO contain a lot of harmonics and crud, and filtering is still necessary. In fact, that's exactly what I did with my own rig using one of these cans--I put a pi low pass filter on the output to clean it up. The oscillator put out fairly low power to begin with, and by the time it passed through the low pass filter it was really low, on the order of 3 or 4 milliwatts, but that was precisely what I wanted--this 10M rig was a dedicated micro-power transmitter for some real QRP experiments with a local ham, and I put a great deal of attenuation on the output. Even three milliwatts was far too much power for what we wanted to do!

That rig is another of those "5 year articles" I'm working on--I have several QRP articles that I started in 1989-1991, still waiting for me to get back to them and finish them up. Once we get the milliwatting column up and running in the QRP Quarterly, I'll finish this one off and submit it. There were several twists in the construction and operation of my particular "Fireball" transmitter.

These oscillator cans were used for the Fireball QRP transmitters several years ago (73 magazine for Nov 1990); they started out using 28.322, I believe, but they eventually had some cans custom built for the 10M CW QRP freq of 28.060 and sold them in a little kit. Those rigs didn't use filters--they connected the oscillators pretty much directly to the antenna (which is obviously not a great idea after you've looked at one on a spectrum analyzer).

They connected them differently from the "standard" configuration of taking the output between pin 8 and ground. They ran them from a battery, which was connected with the positive side to pin 14 (the power pin), and the negative was connected to pin 7 (ground of the oscillator) thru a CW key. Neither of these pins was connected to ground outside the rig, though--the battery and oscillator ground were left floating.

The output pin (8) went to the shield of the coax (external ground), and a 1K pot went from there up to pin 14, the power pin. The hot side of the coax went to the wiper of the pot, for a power control. Maximum power results when the wiper is set to the pin 14 end, not the "output" pin end. Unorthodox, but it works. The Fireball article said they did it that way to get maximum power output. It didn't do anything to clean up the waveform (I checked), but does give more power.

Speaking of power, don't expect a great deal. The output of these cans are relatively high impedance, and a 50 ohm antenna system will load them down quite a bit. At home I measured the output (with a

100 MHz scope) of a 28.636 Mhz can with no load except the 10X scope probe and it was something like 5.4 volts peak to peak (with about 5.4 volts applied to the can). When I connected a 1K resistor from the output to ground, it dropped by a full volt. After running it through the low pass filter (with a modest amount of measured loss) and into a 50 ohm load, the output was down to 1.3V peak to peak, or 0.65V peak, a booming 8 milliwatts!

By the way, forget about trying any VXO'ing tricks with these cans--the suckers do NOT move! (You do not have access to any of the internal workings of the oscillator, so can't affect the frequency.) I even tried lowering the supply voltage once to see if it would move a bit; I forget how low it went before it ceased oscillation completely, but the frequency shift was barely perceptible by ear.

I almost forgot--what other ham frequencies are available? These oscillators are made for the computer industry, but happily several fall within ham bands, even if the frequencies are not always convenient for us; there are several, on 4 bands: 1.843 Mhz, 3.579, 3.686, 14.318, 28.322, 28.636, 29.491. (There is nothing that says you can't run CW in the phone bands, as long as you have the correct license class.)

The latest Digi-Key catalog has a variety of oscillator cans, some as low as \$3.25 and \$3.30 in single quantity. Not all frequencies are available in every series so you might have to look around a bit, but all these frequencies are in the catalog. (The Epson SG-531 series has all 7. This series is in an "8 pin" DIP package, though it actually only has 4 pins. It also has what appears to be an "output enable" pin, which presumably must be tied high to enable the output.)

Later, after taking my little rig to work and checking it on the spectrum analyzer (HP 8592A): I disconnected the filter and ran the oscillator output (28.636 MHz) directly into the spectrum analyzer (through a 500 pF capacitor, since the analyzer has a warning note not to apply DC to the input). As expected, the odd-order harmonics were stronger than the even ones, and it was pretty grim--while the second was down a respectable (and legal) 38 dB, the 3rd was only down 11 dB from the fundamental. The 5th was down by 17, 7th was 22 dB down, the 9th was 27 down, and it finally crossed the line into "FCC legal" at the 11th (!) harmonic, at 31.8 dB below the fundamental. That's about 315 MHz, by the way. Additional harmonics were visible before they petered out into the noise level--the 18th harmonic was the last one seen!

Next, I connected my 5 element low pass filter back up, and ran its output into the spectrum analyzer--things looked much better. The

third harmonic was down by 35 dB, 5th was 43, 7th was 45, and the 9th harmonic was the last one visible before it petered out into the noise.

Remember, these tests were using a fairly high frequency oscillator can where the output was a cruddy sine wave and thus relatively clean (relatively!) compared to a square wave. How about the ones for the lower frequencies? To get some idea of what you can expect with one for 160 or 80 meters I tested a can for 4.096 MHz, which is in the same region. Now this one was fun! The output was a good, respectable square wave with some ringing, with rise and fall times on the order of 3 or 4 nanoseconds--we'd expect some nasty harmonics, and I wasn't disappointed!

Mr. Fourier tells us that a perfect square wave consists of a fundamental and odd order harmonics, with no even harmonics, but we won't see that in the real world. Sure enough, this one had plenty of even harmonics, although they were weaker than the odd ones next to them; the second was about 26 dB below the fundamental, but the third harmonic was only down by 10 dB. Succeeding odd harmonics slowly decreased in amplitude, and they finally dropped to the FCC-legal value of 30 dB below the carrier at the 23rd harmonic! I saw harmonics approaching 500 MHz before they finally disappeared into the noise level. (That's well past the 100th harmonic.)

The bottom line is that if you use one of these computer oscillator cans, regardless of frequency and whether the output is a square wave or approaches a sine wave, you will need to filter the output.

K5F0 said in two postings that I sold him some oscillators at Dayton at my cost of 25 cents each (a great bargain from the tailgating area), but he said they were for 80M. He's wrong...I pray he's wrong...I thought the ones I sold him were for 10 meters; I bought a tube of 8 for \$2.00, and I thought they were all for 10M; maybe they mixed them up in the tube, and there were some there for 80M...and I'll really kick myself if there were :-)

The dealer had several more tubes left of that frequency, and naturally when I went back on Sunday to get more he was nowhere to be found (and I knew precisely where he was on Saturday). I violated one of the most basic hamfest rules: when you see really great deals, hit them hard and fast and buy lots extra for friends, because you'll never find the dealer again, or if you do, the things will be gone!

"In the nutshell on the bottom line"--these oscillator cans make neat little QRP rigs for serious QRP work, approaching the single digit milliwatts, and are available for a few frequencies on 160, 80, 20

and 10 meters. They are very simple to hook up, very stable, but do require filtering on the output, especially on the lower frequencies, which have more of a square wave than the 10M version. They are widely available and inexpensive.

73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From qrp-1@lehigh.edu Mon Jun 12 15:10:02 1995
Message-Id: <9505128029.AA802980105@smtpgw.windata.com>
From: Harry_Chase@smtpgw.windata.com (Harry Chase)
Subject: Re computer oscillator cans
Date: Mon, 12 Jun 1995 11:10:02 EDT

Those oscillator "cans" are useful for a lot of things. In my area at least (MA / NH) I have found that they often show up at flea markets all over the place; NOT just ham flea markets, but the "ordinary" ones that take place somewhere almost every weekend during the summer. It is worth checking them out; I have done very well in finding all kinds of electronic parts at these. Also, things like tools, including machine tools and hard-to-find items, which are useful to any avid homebrewer...

The oscillators can be had in freq's up beyond 100 MHz, usually with ECL outputs. The lower freq units with their forest of harmonics , make good marker generators too. (yes, they can be had at freq's like 500 and 250 KHz.)

Harry
WA1VVH

From qrp-1@lehigh.edu Mon Jun 12 18:22:42 1995
Message-Id: <Pine.SUN.3.91.950612131754.2559A-1000000@ dialin.ind.net>
From: Bob Stafford <bstaffor@dialin.ind.net>
Subject: CQ chemo
Date: Mon, 12 Jun 1995 14:22:42 EDT

I'll be starting chemotherapy again on 6/13. That means I'll become an

insomniac for the next several days. For anyone who would like to help me build up my code speed, I'll be calling CQ on 3763, 3760, and 3688. I'll probably be up most nights. So if you can't sleep or get up real early, listen for me! I'd appreciate the help ;-)

bob N9USD

-.-. --.- -.-. --.- -... . -. ----. --.- -..
Bob Stafford - N9USD aka 'CircuitRider'
Teegarden, IN 46574
(219)784-3790 - MALE breast cancer is a reality -
** Email- bstaffor@dialin.ind.net **
--. --- --. ... --. --. --. --. . - --- -.--- --- --.

From qrp-1@lehigh.edu Mon Jun 12 14:44:50 1995
Message-Id: <sfdc0af5.069@ngwmail.ais.umn.edu>
From: Rick Jandrt <r-jand@ngwmail.ais.umn.edu>
Subject: Digest 22
Date: Mon, 12 Jun 1995 10:44:50 EDT

Could you please resend this to me. My brain wasn't using it's MUF and it instructed the index finger to delete it instead of printing. TIA!!!

Rick Jandrt - Systems Software Programmer - WB9PII
University of Minnesota Voice: (612) 624-6323
1300 So. 2nd St. Suite 626F Fax: (612) 626-1332
Minneapolis, Minnesota 55454-1029 Internet: r-jand@cafe.tc.umn.edu

From qrp-1@lehigh.edu Mon Jun 12 15:43:10 1995
Message-Id: <sfdc19ce.089@ngwmail.ais.umn.edu>
From: Rick Jandrt <r-jand@ngwmail.ais.umn.edu>
Subject: Digest 22 Received!
Date: Mon, 12 Jun 1995 11:43:10 EDT

Thanks to Jim Eshleman I received a copy of digest 22. No need for anyone else to send one. THANKS!!

Rick Jandrt - Systems Software Programmer - WB9PII
University of Minnesota Voice: (612) 624-6323
1300 So. 2nd St. Suite 626F Fax: (612) 626-1332

Minneapolis, Minnesota 55454-1029

Internet: r-jand@cafe.tc.umn.edu

From qrp-1@lehigh.edu Mon Jun 12 16:34:31 1995
Message-Id: <9505128029.AA802971550@mailrouter.alascom.com>
From: "Jim Larsen" <jlarsen@alascom.com>
Subject: Re: FB QSO
Date: Mon, 12 Jun 1995 12:34:31 EDT

Hi Rob (K06KA),

Yes, we sure did make it. I was grinning when we got done.

Thank YOU for your patience. I was running 4 watts to the G5RV @ 38 feet.

FYI,

1st I am changing out my G5RV for 40 and 30 meter dipoles. That's easy.

2nd I will try for a 40 mtr delta loop (single) out in my trees. Do comparisons to the dipole

3rd I will try for a reflector. Tough go on this one.

4th I may change out the dipole for a half-square on 40. Do comparisons to delta loop. Tough on this one also due to the points needed to feed and hang the antenna.

Wish me luck. I am having fun.

73,
Jim Larsen
AL7FS
Anchorage, AK
jlarsen@alascom.com

p.s. I think I will info qrp-1 on this note. Hope you don't mind.

-----Reply Header-----
Author: rheiss@tuba.aix.calpoly.edu
Subject: FB QSO
06-10-95 10:44 PM

We made it! Thanks for copying my 3 watts and being patient with the repeat requests. I was getting seriously flustered on the receiving end

sending QRL to three different guys and fumbling with the RIT control til I got you lined up in the narrow filter. Your signal seemed plenty strong. There is an S meter here if you need to compare a new antenna or whatever.

73 ES CUL, Rob K06KA

From qrp-1@lehigh.edu Mon Jun 12 17:13:28 1995
Message-Id: <n1409163350.28365@msmailgw1.arlut.utexas.edu>
From: "rohre" <rohre@arlut.utexas.edu>
Subject: FW: Ham Com Arlington TX
Date: Mon, 12 Jun 1995 13:13:28 EDT

It sure was great to meet Cam of QRP-ARCI, and all the NorTex QRP gang and visitors at Ham Com! I think there were over 43 in the Sat. QRP session! Good job Chuck! Great dinner eyeball session, and I sold out of the items I brought. (Just two items, hi.)

From: rohre on Mon, Jun 12, 1995 11:56 AM
Subject: Ham Com Arlington TX

As Mitch said, Ham Com was down this year; but at the final Quick Fire Drawing for door prizes, I say a name tag number well above 6000, and I think they were issued consecutively.

Yeah, Mitch got a GREAT deal on the Davco 30 receiver, with manual, and QST review; and he saw Rick's post and had it 24 hours before I would have bought it.

I would like to get one eventually for Rev. George Dobbs, Editor of "Sprat" the G-QRP Club Journal, as he has expressed a wish for one for a number of years, so if any see this little all ham bands including 6Meters, 1967 "Boatanchor", of discretes, PLEASE contact me if it is in good condition, complete. Better still if you have two!

Mitch, enjoy yours, it was great to meet you in person, and please come to Ham Com again; I think the rainy weather cut into their attendance; us Texans don't like to tail gate with water running out of the meters! (I am in no way connected to Vibroplex, but Mitch had a great booth, and neat Vibroplex souvenirs, including a personalized golf shirt, and the Vibroplex book is very interesting. Vibroplex is virtually the history of radio, as they have been in existence longer than any other ham radio electronics organization, and predate even ARRL.)

A very happy Brass Racer customer,
Stuart K5KVH

From qrp-1@lehigh.edu Mon Jun 12 17:45:16 1995
Message-Id: <199506121743.MAA06391@chuck.dallas.sgi.com>
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: HamCom
Date: Mon, 12 Jun 1995 13:45:16 EDT

Gang,

HamCom was a lot of fun this year. A good turnout for the QRP session on Saturday and a good group on Sunday considering that a lot of people left on Saturday.

Friday night was first opening on the indoor fleamarket tables. The QRP ARCI had several table setup with Doc Drake having a real nice display setup and I have a photograph that I will put on the server as soon as it is developed.

The list of guys and girls would be too long to show here and I'd miss someone in the process I'm sure.

Saturday at 9 a.m. I gave an hour and half presentation on kit building and ideas for homebrewing. Just some of the usual things that you need around the workbench and the shack. I'll try to do a small writeup for this group as soon as the desk clears this week and before another trip to MD next week. Same song second verse.

At the table I had the SWL-30, NorCal 40a, and an NN1G Mark II on 40M. Mike Dooley KE4PC had his single lever key made from wood, which got a lot of attention. Dave White had his receiver kit that I had mentioned earlier this year that is being sold by Tanner Electronics here in Dallas. Smitty had some stuff off to one side of the sign and I didn't get to see it before he got it sold, so it must have been some good stuff.

Cam Hartford, N6GA, was here from CA and probably takes the record for the greatest distance traveled or maybe Lee Roosen

W5TEH from Newport RI. I think I've convinced Lee to get on 30M so that the propagation study will have someone to talk to from RI. We all know how rare RI is since there are only about 1300 hams in the whole state.

Calls2dist shows 1522 miles for RI and 1192 miles for CA, so Lee wins the distance award. Sorry Cam, it was close.

We had lots of traffic all during the day and I think we'll see some more activity on the bands for QRP. It seems to be something challenging for people and regenerating their interest in ham radio.

The hall closed at 5 pm and a dozen of us went over to the Olive Garden restaurant and we had reservations at 5:30. We left at 9 pm in the middle of a TX thunderboomer!! Let's see if I can remember everyone there.

Burl Keeton N5DUQ (first 5 band WAS QRP SSB winner), Ok City OK
Roger Rose W5LXS (ARCI TNC net control and tester) Midland TX
Ed De Buvitz W5TTE (tester and alternate net control) Alb. NM
Ed Manuel N5EM a member of this group,
Smitty Smith NA5K famous programmer and member of this group
Michael Hopkins AB5L famous 6M beacon owner and gang this guy
 knows more about the QRP ARCI history than anyone I've
 met and he know boatanchors. His son also was there.
Cam Hartford N6GA (contest chair ARCI and Zuni Looper) Claremont CA
Richard Haynes N5QXF (member of this group) Watauga TX (nr FT Worth)
Chuck Adams K5FO (member of this group) Copper Canyon TX (nowhere)
Stuart Rohre K5KVH (member of this group) Round Rock TX
and wouldn't you know there is one more to make an even dozen
and my mind is blank. As soon as I post this a name will come
back to me for sure. My apologies in advance.

A good time was had by all. We talked about qrp-l, dx, 30M, 40M, 80M, 6M, QRP+ mikes, nets, and all kinds of interesting stuff. Too bad we didn't get film at 11 material. :-)

It was a frog strangler going home to the ranch too. Didn't dare take the shorting wire off the 450 ohm ladder line. Went to bed and up at 4am to pick up the LV1 on 40M. :-)

Sunday was quieter as the crowd was smaller at HamCom in general.

Jim Pope from the Colorado QRP Club was here for the weekend and others that I didn't write down. Good to see the group here. Jim talked about his 2M simplex net group that meets

once a week in C0 and it is working great for them. A good idea.

I passed up a deal on an unbuilt HW-16 and a super deal on a Corsair II that looked like it just came from the factory. I'll let Cam Hartford talk about that deal. :-) A beauty for sure.

I bought the new ARRL Operating Manual and I don't like what I see on 40M for the bandplan. Someone else read it to me and tell if I'm reading it wrong. I'll wait a few weeks til the frustration level goes down and then post. :-) Someone good at writing a level headed mass letter campaign to ARRL can get us some help and we'll do it all at once.

Nobody I know won any of the big prizes, so we all packed up and headed back to the house. A good weekend well spent with a good group of guys.

dit dit es tn timer to all

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Mon Jun 12 13:58:15 1995
Message-Id: <Pine.HPP.3.90.950612083724.11991A-100000@fohn timer.metronet.com>
From: Joe Spencer <jspencer@metronet.com>
Subject: HAMCOM 95
Date: Mon, 12 Jun 1995 09:58:15 EDT

Well it was great!!! This was my first large HAM convention and I had a great time. The QRP group had a good turn out, seemed to be alot of interest in low power/low cost communication. I talked to a couple of vendors who said they were going to get more into low power "stuff" and away from the QRO parts etc. This was due largely to the response they observed at this and a few recent HAM events. Chuck Adams gave an informative talk about kits and kitbuilding on Saturday, The room was full(standing room only, several did). On Sunday the forum was very interesting with Chuck sharing pictures and info on Dayton, Cam was there. A great discussion on antennas and operating practices occurred and upcoming events were discussed. I learned alot and am even more excited about QRP. The best thing that occurred was that my wife Barbara KC5KAH got to meet many of the QRPers(she helped watch the tables during the meetings. She got to talk to some of the guys) and now she has become interested in

QRP. She said of all the Hams she met at HAMCOM... the QRP group was the best.

So if you weren't there you missed a good one!!! If you were then you know.

73, Joe

Joe Spencer KK5NA . .
jspencer@metronet.com
QRP ARCI-8781 NORCAL-1179 NORTEX
Arlington, TX

From qrp-1@lehigh.edu Mon Jun 12 15:16:16 1995
Message-Id: <Pine.SUN.3.91.950612080740.25403C-100000@crl7.crl.com>
From: H Smith <hbs@crl.com>
Subject: Re: HAMCOM 95
Date: Mon, 12 Jun 1995 11:16:16 EDT

I also enjoyed Hamcom 95 and I echo Barbara's sentiments, the QRP folks were the best.

Thanks to Doc for making the arrangements and to Chuck for the QRP presentation on Saturday morning. (I was inspired to start building my 40A :-)

It was great to meet the QRPers from the local area as well as the QRPers from afar (even Mexico).

CU next year,

Smitty, NA5K

Henry Smith (hbs@crl.com)

From qrp-1@lehigh.edu Mon Jun 12 17:03:08 1995
Message-Id: <Pine.SOL.3.91.950612110611.16332A-100000@ns1>
From: "Mitch, WA4OSR" <fmitch@maf.mobile.al.us>
Subject: hamcom attendance

Date: Mon, 12 Jun 1995 13:03:08 EDT

i made it back to mobile about 1:00 am mon morning from hamcom...

the hamfest and the texas hospitality were great!!!

but... the attendance at the 'fest apparently was very low...
it was my first time there, and i had been told to expect between
12k and 18k attendance... my guess at actual attendance was around
5-6k, if that... if anyone has the actual attendance, i would
appreciate them letting me know....

and, there is a silver lining in every cloud... i picked up a
davco dr-30 reciever which i had been trying to find for the
past 2-3 years... and it is in *excellent* cosmetic condx...
(i had one years ago and let it get away from me... but *NOT*
this one...) i am going to fire it off tonight after work...

mitch
wa4osr

* * * The *FIRST HAM OWNER* of The Vibroplex Co., Inc. * * *

Email: fmitch@maf.mobile.al.us or, second choice, fmitch@rd.qms.com
Felton "Mitch" Mitchell, WA4OSR
The Vibroplex Co., Inc.
11 Midtown Park, E.
Mobile, AL 36606-4141 USA
334-478-8873 Vibroplex, 334-342-7259 home, 334-476-0465 FAX

From qrp-l@lehigh.edu Mon Jun 12 15:14:42 1995
Message-Id: <9506121510.AA20076@us1rmc.bb.dec.com>
From: Bill Acito 12-Jun-1995 1107 <acito@asdg.enet.dec.com>
Subject: Mike's for QRP+
Date: Mon, 12 Jun 1995 11:14:42 EDT

There were a couple of postings I wished I saved but didn't.
Anyone with info please post or send mail direct.

>
>
> There were a couple of postings I wished I saved but didn't.
> Anyone with info please post or send mail direct.
>
>
> One mentioned a Radio Shack electret mike element that worked
> well with the QRP+, I believe the 3 wire version. Is this
> correct? If so, what two of the three wires do I use?
>

From qrp-1@lehigh.edu Mon Jun 12 15:27:59 1995
Message-Id: <9506121526.AA21508@voder.nsc.com>
From: Mike Robinson <miker@cc.com>
Subject: Re: QRP "SIGNAL LEVEL DROP"
Date: Mon, 12 Jun 1995 11:27:59 EDT

An excellant point, Claton. Use diplomacy and
tact. Just another way to demonstrate how
QRPers are better ops.

```
=====
7.3 de Michael aa0ub                   | QRP:
miker@cc.com               Norcal #857   |       "This thing's a radio?"
=====
```

From qrp-1@lehigh.edu Mon Jun 12 20:37:26 1995
Message-Id: <n1409151091.63455@msmailgw1.arlut.utexas.edu>
From: "rohre" <rohre@arlut.utexas.edu>
Subject: RE: QRP+ CAUTION
Date: Mon, 12 Jun 1995 16:37:26 EDT

Bill, the BEST way to avoid this problem for any rig and for lightning
protection is the one you mentioned, disconnecting an unused rig from its
antenna! (And even grounding its input). In storm conditions, ground the feeds.
Keep the feedline some feet away from rigs during an electrical storm, and
disconnect all rigs and shack accessories from the wall AC outlets, NOT just
turn off the outlet strip switch. The zener diode thing is used on home brew
xmtr.just for high SWR, and may not help with a nearby QRO signal. Don't use a

long wire, or Marconi without using a wire counterpoise. Most ham stations cannot get a GOOD RF ground any other way than counterpoise for long wire antennas. Dont use any wire antenna that brings high impedance into the shack, or unbalanced RF. If using open wire line, twist it every couple feet to keep it from undesirable coupling to metal fences, gutters etc. See the articles on ladder line; if used on balanced antennas, and keep balanced in its down lead portion, it is a great way to go. Consider the Marconi and long wires were developed and used with tube rigs before solid state receivers; of course the Marconi predates tubes! (Used for Spark!)

72,
Stuart
K5KVH

From qrp-1@lehigh.edu Mon Jun 12 12:05:35 1995
Message-Id: <9506121220.AA08490@dtcs70.dtc.kodak.com>
From: mitchell@dtcs70.dtc.kodak.com (Brad Mitchell)
Subject: QRP+ Caution/Possible Solution??
Date: Mon, 12 Jun 1995 08:05:35 EDT

My caution to all of you is to be careful of your rigs during Field Day. I'm sure that for many of you there will be lots of stray rf, and lots of antennas nearby. PROTECT YOUR NEW RIGS!!!

P.S. any suggestions re how to avoid this problem would be greatly appreciated

Bill Schiller KJ5CI
schiller@cherokee.nsuok.edu

Sounds like a good idea would be to put a Zener Diode on the output circuit. The Spider had one of 33v, (only 1watt) would need a higher for 5w rig, I blew that Zener when I transmitted 100 watts with my kenwood , with both rigs being coupled to the antenna via a switch. Then the supply shorted.. Hey I wonder if They got smart, and put zeners in to protect against frying the mixer, and that's what happened to whoever blew their qrp+ ??

73 Brad WB8YGG

From qrp-1@lehigh.edu Mon Jun 12 12:37:59 1995
Message-Id: <9506121251.AA08500@dtcs70.dtc.kodak.com>
From: mitchell@dtcs70.dtc.kodak.com (Brad Mitchel)
Subject: Re: QRP+ Caution/Possible Solution??
Date: Mon, 12 Jun 1995 08:37:59 EDT

Sounds like a good idea would be to put a Zener Diode on the output circuit. The Spider had one of 33v,(only 1watt) would need a higher for 5w rig, I blew that Zener when I transmitted 100 watts with my kenwood , with both rigs being coupled to the antenna via a switch. Then the supply shorted.. Hey I wonder if They got smart, and put zeners in to protect against frying the mixer, and that's what happened to whoever blew their qrp+ ??

Replying to my own note that sounded stupid..
What I mean is, maybe the zener would also protect the receiver?
Depending on the t/r switching, yo might be able to put a small voltage zener across the rx input and protect it that way?
It of course depends on the max voltage that the rx circuit can withstand, and the t/r switching involved. When I was kid, I used to do a lot of swling, and had problems with static on the antenna, so I just used a neon bulb across the antenna. You would be surprised to see how many times that thing lit up!!

From qrp-1@lehigh.edu Mon Jun 12 18:53:07 1995
Message-Id: <199506121850.LAA10804@ix3.ix.netcom.com>
From: dcwill@ix.netcom.com (Dave Williamson aa4zx/8)
Subject: reduced power on ft-840, et cetera
Date: Mon, 12 Jun 1995 14:53:07 EDT

Howdy folks - this is my first post. Thanks to those who helped out getting me 'on the air' here, so to speak. Looks like a great group! Certainly is a great subject . . .

So on to some questions:

I'm running a Yaesu FT-840 (which I'm sorely tempted to sell to get a QRP+!) and the minimum power, using the front-panel control, is about 5 watts, just barely QRP. Does anybody know of a way to get that down to practically zero? I've talked with Yaesu tech support, but they were just about

clueless. They helped with another issue, but as for this one, "why the heck would anybody want LESS power?..." I've thought about making an external resistor network, but that seems rather inelegant.

With regards to those of you using QRP+s: I've seen a few gripes as I've lurked the last week or so, but apparently most are pleased with this little rig? Not having one to play with, I wonder how the receiver might compare with the -840 I'm using. Does it use a noisy relay for keying? Can one vary the sidetone? To zero-beat, is it necessary to match tones, or can one drop to tone down to zero hertz like on my old trusty TenTech Century 21? Can it be modified for MARS freqs? And how useable is it for listening to BC stations - I know it doesn't have AM capability and I'd have to zero-beat the station...

See y'all on 30 and 40 . . .

73 de aa4zx/8 near Elkins, WV

From qrp-1@lehigh.edu Mon Jun 12 21:00:43 1995
Message-Id: <199506122058.NAA03559@ix3.ix.netcom.com>
From: dcwill@ix.netcom.com (Dave Williamson aa4zx/8)
Subject: Re: reduced power on ft-840, et cetera
Date: Mon, 12 Jun 1995 17:00:43 EDT

>Dave . . Almost any radio that has an external ALC connection can be
>dropped to QRP power levels with a 9V battery, a pot and one or two fixed
>resistors. There was an article in, I believe, the New Ham Companion
>section of QST a few months back that dealt with the subject. I'm sending
>you this message from work so don't have access to my magazines at the
>moment. :-) I'm sure you'll get some other messages on this subject with
>specifics. As I recall this setup will let you run anywhere from milliwatts
>to full power.

>

>73 . . . Allen

>=====

>Allen Jones K9DZE ajones@niia.net
>Michigan City, Indiana EN61nq
>ARCI #8797 G-QRP #8812 NorCal #1061
>SWOT #1368 SMIRK #5403

>=====

Thanks, Allen. That sounds easy - don't know why I didn't think of that! Sure enough, I see in the Yaesu manual that 0 to neg 4 volts can be applied to the ALC IN jack to lower drive to protect a linear amp. Never having run

anything other than extremely barefoot (a max of 40 watts up until recently!), that never occurred to me.

I'll grab a battery and a pot and see what happens!

'Course, then I'm gonna have to come up with a good way of measuring low power... the MJF949C I'm using now is fine down to around a half watt, if I can trust the meter... but I'd rather be more accurate.

Thanks again -

73 de aa4zx/8
dcwill@ix.netcom.com
QRP ARCI #6551

From qrp-1@lehigh.edu Mon Jun 12 23:34:31 1995
Message-Id: <199506122331.QAA01908@ix3.ix.netcom.com>
From: dcwill@ix.netcom.com (Dave Williamson aa4zx/8)
Subject: Re: reduced power on ft-840, et cetera
Date: Mon, 12 Jun 1995 19:34:31 EDT

>Hi, Dave

> Small world; I posted something very similar a couple of weeks
>back. I've got an 840 too; I measured output on a Drake WM-4 wattmeter,
>and got slightly more than 5 watts on most of the bands (5 and a half,
>etc; slightly higher output on the lower bands). I was interested in
>making sure that I could run my Ten Tec 6 meter transverter, which
>requires 5-6 watts max input, off the 20 meter side on the Yaesu.
> I've tried jury-rigging one of those ALC mods, but to be honest
>haven't quite got it working yet. I'm using a 100k ohm radio shack pot
>and a 1.5 volt battery (from a description in Dave Ingram's qrp book),
>but I can't seem to get much voltage reduction. Let me know what kind of
>luck you have!

> I really like my 840, by the way!

>

> Matt KN6CR

Howdy, Matt...

Well, I gave it a try just a few minutes ago, and it seemed to work fine. I just need to come up with something more permanent. And what about that QRP book? Not sure I've heard of it.

I put a nine-volt battery across a 100k pot, with the wiper connected to

the center pin of the '840's ALC jack, and put the positive lead from the battery on the shield of the ALC jack. With the '840's RF power as far down as possible (about 5-6 watts according to my not-so-really-accurate MFJ 940C), it took about -0.94 volts to knock the output down to nothing. With a higher output power, more neg voltage was required. The Yaesu manual says 0 to neg 4 volts... Your 1.5 volt battery oughta work, with the power set down to a minimum. Might not do it if it's set at 100W, though. Maybe the polarity is wrong? It's gotta be negative on the center pin.

I don't know how long a 9-volt battery can provide 90 microamps, but I suppose it's a long time.

I guess I might try to find the min-max range of working voltages, and use a fixed resistor _and_ a smaller pot, for a less-touchy feel.

Lemme know if you get it working, and what _you_ do.

Maybe you can help _me_... do you know of an easy QRP wattmeter project? I'd love to be able to modify my existing MFJ 949C VersaTuner II so that the low (30 watts LOW!??) range is, say, 3 or perhaps 5 watts. I think there are adjustment pots inside there somewhere, but haven't had time to look into it yet.

I like my 840, too. It has what to my untrained ears seems to be a very good receiver. I just wish it had better break-in than is provided with that clacky relay <g>. It's easy to control with a computer, too.

72 - - - de aa4zx/8
near Elkins WV
dcwill@ix.netcom.com
QRP ARCI 6551

From qrp-1@lehigh.edu Mon Jun 12 16:43:43 1995
Message-Id: <9505128029.AA802972091@mailrouter.alascom.com>
From: "Jim Larsen" <jlarsen@alascom.com>
Subject: Re[2]: AL7FS Anchorage, Alaska Activity Info
Date: Mon, 12 Jun 1995 12:43:43 EDT

Hi Paul,

We may have better luck after I get a delta loop up. I have been heard in Texas. I hear a few 5s and 0s and 9s but so far no 4s on my G5RV. We will make it eventually. Summer is not the best time. Sunset right now is 11:35pm and I start to skip into the darkness skip zone around 0330Z. It is kinda weird to

skip into CA while it is still three to four hours til sunset. I worked Hawaii and California this weekend. Biggest problem is being heard by the stations in the lower 48. Too much QRM. (and QRN).

73,

Jim Larsen
AL7FS
Anchorage, Alaska
jlarsen@alascam.com

-----Reply Header-----
Author: Aa4xx <aa4xx@nando.net>
Subject: Re: AL7FS Anchorage, Alaska Activity Info
06-09-95 07:14 PM

Jim,

Thanks for your postings. I will be listening for you this weekend around 7040 KHz during the wee hours. I'd love to work you for 40 Meter QRP WAS 500mW! 72, de Paul (Raleigh, NC) AA4XX@nando.net

From qrp-1@lehigh.edu Tue Jun 13 00:54:32 1995
Message-Id: <199506130053.UAA57747@nss1.CC.Lehigh.EDU>
From: owen.nelson@prostar.com
Subject: Thanks, and QRP and then some
Date: Mon, 12 Jun 1995 20:54:32 EDT

Greeting,

Thanks to everyone for the help with my first project.
The transmitter should be done soon now that I have all the parts including the replacement for the 2N3553 that I requested here earlier.

While working on the new transmitter I thought I would try some qrp phone with my Yaesu FT301 and a watt meter.

I made a great contact with a VK9 and got a 5-5 report on 5 watts!!

WELL I THOUGHT IT WAS 5 WATTS.

I rechecked my output after the contact and it was 15! Oooops.

Oh well 6800 miles on 15 watts, still not bad for a first try.

I'm hooked now!

Thanks again for the help and I'm sure I'll need more.

Owen - Kb7uxp

To be "mostly harmless" and "very mattress-like"
is very usefull.....sometimes. owen.nelson@prostar.com

From qrp-1@lehigh.edu Tue Jun 13 11:46:45 1995
Message-Id: <9506131200.AA09052@dtcs70.dtc.kodak.com>
From: mitchell@dtcs70.dtc.kodak.com (Brad Mitchel)
Subject: Zener on the output protecting receiver???
Date: Tue, 13 Jun 1995 07:46:45 EDT

Ok, because I know that I thoroughly confused everybody that read what I was babbling about, let me try this again..

I made several qrp transceivers over the past 2 years.

One of several was the Spider.

This happened to have a Zener across the output to protect the 2n2219 transistor during high swr situations.

HOWEVER.. While transmitting with the TS-520 at 100w (I do that on occasion) the Spider's Zener blew. This was caused by high voltage induced into the Spider's antenna terminal by the ts-520. I didn't believe it by repeated the exercise and yes indeed it was true, the 520 actually wiped out the zener (shorted failure mode) in the spider, 33v zener. I venture to say that if the zener was not in the circuit, that I probably would have toasted the 40673!

Anyway, my point is, that depending on the max allowable voltage on the rx input, the tx protection zener may actually serve two purposes! I think that this may be more true for situations where you have a QRP transceiver that is running 1w or so so that the zener value is around 40 or less.

There, maybe that's more clear, and yes I know that the zener in the output circuit is supposed to be there to protect the final amp transistor.

regards, Brad WB8YGG

From qrp-1@lehigh.edu Mon Jun 12 14:57:46 1995
Message-Id: <199506121446.KAA25939@dartvax.dartmouth.edu>
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: Re: `NE40/40 Mods
Date: Mon, 12 Jun 1995 10:57:46 EDT

>Hi Ernie:

>

>Can you copy them for me too? I have a 40-40 that needs to be built so
>now would be the ideal time to incorporate the mods. I'm good in the
>callbook from 1990 onward. I'll reimburse copy and postage costs.

>

>Many TNX es 73 de rich K7YHA

To QRP-L Group

Rich,

Sure I'll copy the mods for you. I think that I'll call the 72 News Letter editor and see if he can get me a copy on disk.

I can print them on my laser copier and send them out. I'm new to internet,so I don't really know my way around,but I thought that we can send that kind of thing right here via some sort of file transfer. That way the graphics would be sent as well as the text.

Give me a couple of days to get the snail mail version together.

Feel free to shout at me again if you don't hear from me here.

I was wondering if my mail to QRP-L was getting to the group.

I didn't see it posted with the new mail listing. But maybe this is just the way it's supposed to be.

72,& 73

de AA1IK Ernie,

N.E. QRP # 202

>